

GenCore version 5.1.3
Copyright (C) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model
Run on: December 6, 2002, 21:11:51 ; Search time 45 Seconds
(without alignments)
10392.935 Million cell updates/sec

Title: US-10-025-514-15
Perfect score: 1525
Sequence: 1 tctagaccatggaagaccct.....ccagtcaggccctagtcgac 1525

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 15338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2.6/ptodata/1/ina/5A-COMB.seq:*
2: /cgn2.6/ptodata/1/ina/5B-COMB.seq:*
3: /cgn2.6/ptodata/1/ina/6A-COMB.seq:*
4: /cgn2.6/ptodata/1/ina/6B-COMB.seq:*
5: /cgn2.6/ptodata/1/ina/PTUS-COMB.seq:*
6: /cgn2.6/ptodata/1/ina/Backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	629.4	41.3	1308	3	US-09-023-173-10
2	629.4	41.3	1308	3	US-09-023-339-6
3	628.4	41.2	1185	3	US-09-023-339-3
4	628.4	41.2	1260	3	US-09-023-173-5
5	429	28.1	1185	3	US-09-023-339-2
6	429	28.1	5932	4	US-09-299-141-4
7	429	28.1	6142	4	US-09-299-141-8
8	429	28.1	6565	4	US-09-299-141-1
9	429	28.1	6714	4	US-09-299-141-6
10	429	28.1	6924	4	US-09-299-141-9
11	429	28.1	6924	4	US-09-299-141-10
12	429	28.1	6924	4	US-09-299-141-11
13	429	28.1	6981	4	US-09-299-141-7
14	429	28.1	7054	4	US-09-299-141-3
15	429	28.1	7405	4	US-09-299-141-2
16	404.6	26.5	1356	3	US-08-002-202-16
17	404.6	26.5	1356	3	US-08-481-534-16
18	403	26.4	1356	3	US-08-002-202-12
19	403	26.4	1356	3	US-08-481-534-12
20	399.8	26.2	1356	3	US-08-002-202-18
21	399.8	26.2	1356	3	US-08-481-534-18
22	311.8	20.4	1339	1	US-07-859-480-1
23	227.2	14.9	7492	4	US-09-299-141-5
24	219.8	14.4	1423	1	US-07-829-954-1
25	219.8	14.4	1423	1	US-07-994-423-1
26	219.8	14.4	1423	1	US-08-421-891-1
27	207.8	13.6	10627	1	US-08-060-925A-12

28	125.4	8.2	194	2	US-07-963-538B-5	Sequence 5, Appli
29	124.6	8.2	2466	4	US-09-271-608-7	Sequence 7, Appli
30	124.6	8.2	2466	4	US-09-695-950-7	Sequence 7, Appli
31	124.6	8.2	2466	4	US-09-696-147-7	Sequence 7, Appli
32	124.6	8.2	2466	4	US-09-696-364-7	Sequence 7, Appli
33	123	8.1	180	3	US-08-483-503A-2	Sequence 2, Appli
34	106.4	7.0	1508	3	US-08-660-347-1	Sequence 1, Appli
35	81.6	5.4	1179	4	US-08-745-995A-22	Sequence 22, Appli
36	81.6	5.4	1179	4	US-08-745-995A-23	Sequence 23, Appli
37	81.6	5.4	1191	4	US-08-745-995A-4	Sequence 4, Appli
38	81.6	5.4	1191	4	US-08-745-995A-5	Sequence 5, Appli
39	81.6	5.4	1191	4	US-08-745-995A-34	Sequence 34, Appli
40	81.6	5.4	1191	4	US-08-745-995A-35	Sequence 35, Appli
41	81.6	5.4	1197	4	US-08-745-995A-10	Sequence 10, Appli
42	81.6	5.4	1197	4	US-08-745-995A-11	Sequence 11, Appli
43	81.6	5.4	1260	4	US-08-745-995A-16	Sequence 16, Appli
44	81.6	5.4	1260	4	US-08-745-995A-17	Sequence 17, Appli
45	81.6	5.4	1358	4	US-08-745-995A-7	Sequence 7, Appli

ALIGNMENTS

RESULT 1
US-09-023-173-10
; Sequence 10, Application US/09023173
; Patent No. 6066781
; GENERAL INFORMATION:
; APPLICANT: Sutliff, Thomas D.
; TITLE OF INVENTION: Production of Mature Proteins
; TITLE OF INVENTION: in Plants
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dehlinger & Associates
; STREET: 350 Cambridge Ave., Suite 250
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/023.173
; FILING DATE: 13-FEB-1998
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/038,168
; FILING DATE: 13-FEB-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Petithory, Joanne R
; REGISTRATION NUMBER: P42995
; REFERENCE/DOCKET NUMBER: 0665-0007.30
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-324-0880
; TELEFAX: 650-324-0960
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1308 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-09-023-173-10

Query Match 41.3%; Score 629.4; DB 3; Length 1308;
Best Local Similarity 70.8%; Pred. No. 8.9e-154;
Matches 837; Conservative 0; Mismatches 346; Indels 0; Gaps 0;
OY 11 GGAAGACCTCAAGCGCAGCGCTCAAAAACCGACACCATCATCAGCAAGACCA 70
||| ||||| || ||||| ||||| || ||||| ||||| ||||| ||||| ||||| |||||

Db 481 CTCGAGAGGGGCCAGGCGAAGATCGTGACCTGCTCAAGGAATTTGGACGGACACC 540
QY 552 GTCCTTCGACGAGTAACTATATTTTTCAGGGTAAAGTGGAGACGCTCTTTCGAGGTT 611
Db 541 GTCCTTCGCGCTCGTCAACTACATCTTCTCAAGGGCAAGTGGAGCGCCGCTTCGAGGTG 600
QY 612 AAAGATACGTAAGAGGAAGATTTTCATGTTGATCAAGTTACTACTGTCAAAAGTTCCAAATG 671
Db 601 AAGACACCGAGGAGGAGGACTTCCAGCTGCACGAGTCCACCCTCAAGGTTCCCGATG 660
QY 672 ATGAAAAGACGCGGTGTTCAATATTTCAACATTTGCAAAATTTAAAGTTCTTGGGCTTA 731
Db 661 ATGAAGAGGCTCGCATGTTCAACATCAGCACTGCAAGAGCTCTCCAGCTGGGTGCTC 720
QY 732 TTAATGAAGTATTAGTAAAGCTACTGCTATTTTTCATGTTTACCAGAGGTAAGCTT 791
Db 721 CTCATGAAGTACCTGGGAGAGCGCCAGCCCATCTTCTTCGCGGACGAGGGCAAGCTC 780
QY 792 CAACATTTAGAGATGAGTTGACTCATGACATTTATTAATTTTATAGAGACGAGGAT 851
Db 781 CAGCAGCTGGAGACGAGCTGACGACGACATCATCAGAAATTTCTTGGAGAGGAGAC 840
QY 852 CGTCGTAGCGGTTCTGTCACCTGCCAAGTTAAGTATCACCCTGCTTACGACTTAAAT 911
Db 841 AGGCGCTCCGCTAGCTCCAGCTCCGAAAGCTGAGCATCACCGCAGGTACGACCTGAAG 900
QY 912 TCTGTTTATAGCCAGTAAAGTATACCAAAAGTTTCTTAACGCTGCGGATTTGAGTGGT 971
Db 901 AGCGTCTGGGCGAGCTGGGATCAGGAGTCTTCAGCAGCGGCGGACCTCTCCGCG 960
QY 972 GTTACTGAAGAGCTTCCATTTAAATTTGAGTAAAGCTGTTCACAAAGCGCTTTAACTATT 1031
Db 961 GTGACGAGGAGGCGCCCTGAAGCTCTCCAAAGCGCTGCAAGAGCGGTGCTCACGATC 1020
QY 1032 GATGAAAAGGTACGAGGCGCGCGGCTATGTTCTTGGAGAGTNTTCCAATGAGCATT 1091
Db 1021 GACGAGAGGAGGAGGAGCTGCGGCGGCTATGTTCTTGGAGGCTATCCCATGTCATC 1080
QY 1092 CCACACAGAGTTAAATTTAAATTAACCATTTCTGTTTCTGATGATCGAGCAACACTAAA 1151
Db 1081 CGGCGCGAGGTCAAGTTCAACAAAGCCCTCGCTTCTGATGATCGAGCAACAGGAG 1140
QY 1152 AGCCCATTTATGAGGTAAGGTTGTCAACCCCACTCAGAAG 1193
Db 1141 AGCCCGCTCTTCATGGGAAGGTGCTCAACCCCGCAGAGAG 1182

RESULT 4

US-09-023-173-5
; Sequence 5, Application US/09023173
; Patent No. 6066781

GENERAL INFORMATION:

; APPLICANT: Sutliff, Thomas D.
; APPLICANT: Rodriguez, Raymond L.
; TITLE OF INVENTION: Production of Mature Proteins
; TITLE OF INVENTION: in Plants
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dehlinger & Associates
; STREET: 350 Cambridge Ave., Suite 250
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/023,173
; FILING DATE: 13-FEB-1996

; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/038,168
; FILING DATE: 13-FEB-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Petlichory, Joanne R
; REGISTRATION NUMBER: P42995
; REFERENCE/DOCKET NUMBER: 0665-0007.30
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-324-0880
; TELEFAX: 650-324-0960
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1260 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; CLONE: codon-optimized Ramy3D signal-mature AAT
; US-09-023-173-5

Query Match 41.2%; Score 628.4; DB 3; Length 1260;
Best Local Similarity 70.7%; Pred. No. 1.6e-153;
Matches 836; Conservative 0; Mismatches 346; Indels 0; Gaps 0;

QY 12 GAAGACCCCTCAAGCGACGCGGCTCAAAAACGACACCAAGTATCATCACCAAGACCAT 71
Db 76 GAGGACCGCGAGGCGCGCGCCCAAGAGACGACACCAAGGACGACGACGACGACGAC 135
QY 72 CGACATTTAAATAAATTAATCTCAATTTAGCGGAATTTGCTTTTCTTTGTATAGACAA 131
Db 136 CGAGGTTCAACAAGATCAACCCGGAATTTGGCGGAATTCGCTTACGCTGTACCGCCAG 195
QY 132 TTAGCTCATCAAAAGTAAATCTACTAATTTTATTTAGTCTGTTTCTATTGCCACTGT 191
Db 196 CTGCGGACCAAGTCCCACTCCCAACATCTTCTTCCAGCCGCTGAGCATCGCACCGCC 255
QY 192 TTGCGCATGTTGAGTTAGTACTAAAGCGGATACCCATGACGAGATTTTAGAAGTTTA 251
Db 256 TTGCGCATGTTGCTTCCCTGGGTACCAAGGCGGACACCCAGCAGGAGATCTCGAAGGGCTG 315
QY 252 AACTTTAAATTTGACGAAATCCCAAGAGCCCAATTTACGAGGAGTTTCAAGAGTTGTTG 311
Db 316 AACTTTCACTGACGAGATCCCGGAGGCGCAGATCCACGAGGCTTCCAGGAGCTGCTC 375
QY 312 AGAATTTGAATCAACTGATTTCTCAATTTGCAATTAAGTACTGAGTAAAGGTTTATTTTG 371
Db 376 AGGACGCTCAACCAAGCGGACTCCAGCTCCAGCTCCAGCTCCAGCTCCAGCTCCAGCT 435
QY 372 TCTGAAGTTTAAATTTGTTGACAAATTCCTAGAGAGCTCAAGAACTATATCATAGT 431
Db 436 TCCGAGGCGCTCAAGCTCGCTGATAAGTTCTTGGAGGAGCTGAAGAGCTTACCACTCC 495
QY 432 GAGGCTTTTACCGTTAATTTTGTGATCTAGGAAAGCTAAAAAGCAAAATTAATGATTA 491
Db 496 GAGGCTTTACCGTCACTTCCGAGGACCGGAGGCGCAAGAGCAGATCAACGACTAC 555
QY 492 GTTGAGAAAGGCGACCCAGGTAAGTCTGTTGACCTAGTTAAAGAAATAGATCGTGTATAC 551
Db 556 GTCGAGAAAGGCGACCCAGGCAAGATCGTGGACCTGCTCAAGGAATTTGGACAGGACAC 615
QY 552 GTCTTGCCTAGTTTAACTATATTTTTCAGGGTAAGTGGGAAAGCTCTTTCGAGGTT 611
Db 616 GTCTTGCCTAGTTTAACTATATTTTTCAGGGTAAGTGGGAGGCGCGCTTTCGAGGTT 675
QY 612 AAGATACTCAAGAGGAAGATTTTCTATGTTGATCAAGTTTACTACTGTCAAAAGTTCCAATG 671
Db 676 AAGACACCGAGGAGGAGGACTTCCAGCTGACAGGTCACCACTCAGGTCAGGTCAGGATG 735
QY 672 ATGAAAAGACTGGGTATGTTCAATATTTCAACATTTGCAAAATTAAGTCTTTCGGGTCTTA 731
Db 736 ATGAAGAGGCTCGGATGTTCAACATTCAGCACTGCAAGAAAGCTCTCCAGCTGGGTGCTC 795

QY 732 TTAATGAAGTATTAGGTAAACGCTACTGCTATTATTTTTTTTACCAGACGAAGTAAAGCTT 791
Db 796 CTATGAAGTACCTGGGAAGCCACCGCATCTCTTCTCCGACGAGGCGACGCTC 855
QY 792 CAACATTTAGAGAAATGAGTTGACTCATGACATTAATTAATTAATTTTATAGAACGAGGAT 851
Db 856 CAGCACTGGAGAACGAGCTGAGCGACGACATCATCACGAAGTTCTGTGAGAACGAGGAC 915
QY 852 CGTCGTAGCGCTCTCTGCACTGCGCAAAAGTTAAGTATCACCGGTACTTACGACTTAA 911
Db 916 AGCGGCTCGCTAGCTCCACCTCCCGAAGCTGAGGATCACCGGACGTACGACCTGAAG 975
QY 912 TCTGTTTTAGGCGAGTTAGGTATTACCAAAAGTTTTTCTAACGGTCCCGATTGAGTGT 971
Db 976 AGCGTCTGGCGAGCTGGGCATCAGAAAGTCTTCAGCAAGCGCGGACCTCTCCGCG 1035
QY 972 GTTACTGAAGAGCTCCATTAATTTGAGTAAGCTGTTTCAAAAAGCCCTCTTAATTAAT 1031
Db 1036 GTGACGAGGAGGCGCCCTTGAAGCTCTCAAGCGCTGCACAAGCGGTGCTCAGCATC 1095
QY 1032 GATGAAGAGGTACCGAGCGCGCGCTATGTTCTCGAAGCTATTCATGAGCAT 1091
Db 1096 GACGAGAGGAGCGGAAGCTGCGGGGCGCATGTTCTTGAGGCGCATCCCATGTCCATC 1155
QY 1092 CCACCAAGAGTTAAATTTAATAAACCATTCGTTTTTCTGATGATGAGCAGAACACTAA 1151
Db 1156 CGCGCGAGGTCAAGTTCAACAGCCCTTCGTTCTTCTGATGATGAGCAGAACAGGAG 1215
QY 1152 AGCCCATTTGTTATGGGTGAGGTGTTCAACCCCACTCAGAG 1193
Db 1216 AGCCCTCTCTATGAGGAAGTCTGTTCAACCCCACTCAGAG 1257

RESULT 5

US-09-023-339-2
; Sequence 2, Application US/09023339
; Patent No. 6127145
; GENERAL INFORMATION:
; APPLICANT: Sutliff, Thomas D.
; APPLICANT: Rodriguez, Raymond L.
; TITLE OF INVENTION: Production of '1-Antitrypsin
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dehlinger & Associates
; STREET: P.O. Box 50850
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/023,339
; FILING DATE: 13-FEB-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/037,991
; FILING DATE: 13-FEB-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Petithory, Joanne R
; REGISTRATION NUMBER: P42,995
; REFERENCE/DOCKET NUMBER: 0865-0003.30
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-324-0880
; TELEFAX: 650-324-0960
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1185 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; CLONE: native AAT coding sequence
US-09-023-339-2

Query Match 28.1%; Score 429; DB 3; Length 1185;
Best Local Similarity 60.2%; Pred. No. 6.3e-102;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCCCTCAAGCGCGCGCTCAAAAAACCGACACCATCATCAGCAGCAAGACCAT 71
Db 1 GAGGATCCCCAGGAGATGCTGCCAGAGACAGATACATCCCACTATGATCAGGATCAC 60
QY 72 CCGACTTTTATATAAATTTACTCCCAATTTAGCCGAATTTGCTTTTCTTTGTATAGACAA 131
Db 61 CCAACCTTTCAACAAGATCACCCCAACCTGGCTGAGTTCGCTTTCAGCCTATATACGCCAG 120
QY 132 TTAGCTCATCAAGTAAATTTCTACTAAACATTTTTTTTATGTCCTGTTTCTATTGGCCACTGCT 191
Db 121 CTGGACACCAAGTCCAACAGCACCANATCTTCTCTCCCAAGTGAGCATCGCTACAGCC 180
QY 192 TTCGCCATGTTGAGTTTATAGTACTAAAGCCGATACCCATGACGAGATTTTAGAAGGTTTA 251
Db 181 TTTGCAATGCTCTCCCTGGGACCAAGGCTGACACTCAGCATGAATCTCTGGAGGCGCTG 240
QY 252 AACTTTAAATTTGACCGAAATCCCAAGAGCCCAATTTACGAGGGTTTTCAGAGGTTGTTG 311
Db 241 AATTTCAACCTCAGCGAGATTTCCGGAGGCTCAGATCCTCAAGGCTTCCAGGAACTCCTC 300
QY 312 AGAATTTGAATCAACCTGATTTCTCAATTTGCAATTAATCTACTGCTAAACGGTTTATTTTG 371
Db 301 CGTACCTCAACAGCAGCAGAGCCAGCTCCAGCTGACCCGCAATGGCTGTTCTCCTC 360
QY 372 TCTGAAGTTTAAATTTGGTTGACAAATTTCTAGAAGACGCTCAAGAACTATATCATAGT 431
Db 361 AGCGAGGCGCTGAAGCTAGTGGATAAGTTTTCGAGGATGTTTAAAGATTTGTACCACCTCA 420
QY 432 GAGCTTTTACCGTTAATTTTGGTGTACTGAGGAAGCTAAAGAAATTAATGATTAT 491
Db 421 GAAGCCTTCACTGTCAACTTCGGGGACACCGAAGAGGCCAAGAAACAGATCAAGATTAC 480
QY 492 GTTGAGAAAGCCACCCAGGGTAAAGTCTGTACCTAGTTTAAAGAAATTTAGATCGTGATACC 551
Db 481 GTGGAGAGGTACTCAAGGGAAATTTGTGGATTTGTCAGAGGCTTGACAGAGACACA 540
QY 552 GTCTTCGCACTAGTTAACTATATTTTTTCAAGGGTAAAGTGGGAACGCTCTTTTCGAGGTT 611
Db 541 GTTTTTGCTCTGTGTGAATTTACATCTTCTTTAAAGGCAATGGGAGACACCTTTTGAAGTC 600
QY 612 AAAGATCTGAAGAGAGAGATTTTCATGTTGATCAAGTTACTACTGTCAAAGTTCCAATG 671
Db 601 AAGACACCGAGGAAGAGGACTTCCACGTGGACAGGTGACCCCGTGAAGGTGCTTATG 660
QY 672 ATGAAGAAGACTGGGTATGTTCAATATTCAACATTTGCAAAAAATTAAGTTCTTGGGCTCTTA 731
Db 661 ATGAAGCGTTTAGGCATGTTTAACTCCAGCACTGTAAAGAGCTGTCACCTGGGTGCTG 720
QY 732 TTAATGAAGTATTTAGGTAACGCTACTGCTATTTTTTTTTTACCAGACGAGGATTAAGCTT 791
Db 721 CTGATGAATACCTTGGGCAATGGCCCGCATCTCTTCTCTGCTGATGAGGGGAAACTA 780
QY 792 CAACATTTAGAGATGAGTTGACTCATGACATTAATTAATTAATTTTATAGAGAAGCAGGAT 851
Db 781 CAGCACTGGAAAAATGAACCTACCCACGATATCATCAAGATTTCTTGGAAAAATGAAGAC 840
QY 852 CGCTAGCGCTTCTCTGCACCTGCCAAAGTTAAGTATCAACCGGTACTTACGACTTAAAA 911
Db 841 AGAGGCTCTCCAGCTTACATTTACCCAAACTGTCCATTTACTGGAACCTATGATCGAAG 900
QY 912 TCTCTTTTAGCCAGTTAGGTATTTACCAAGTTTTCATACGGTCCGCGATTTGAGTGGT 971
Db 901 AGCGTCTCTGCTCAACTGGGCGATCACTAAGGTCTTTCAGCAATGGGCTGACCTCTCCGGG 960

TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE: Description of Artificial Sequence: PLASMID
OTHER INFORMATION: p13msENC-AT
US-09-299-141-8

Query Match 28.1%; Score 429; DB 4; Length 6142;
Best Local Similarity 60.2%; Pred. No. 1.le-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCTCAAGGCGCGCGCTCAAAAAACCGACACAGTATCATCAGCAACCAAGACCAT 71
Db 1595 GAGGATCCCGAGGAGATGCTGCCAGAAAGACAGATACATCCACCATGATCAGGATCAC 1654

QY 72 CCGACTTTTAAATAAATTAATCTCCAAATTTAGCCGAAATTTGCTTTCTTTGTATAGACAA 131
Db 1655 CCAACCTTCAACAAGATCACCCCAACCTGGCTGAGTTTCGCTTTCAGCCTATACCGCCAG 1714

QY 132 TTAGCTCATCAAGTAAATTTCTACTAACATTTTTTTTGTAGTCTGTCTTATTGCCACTGCT 191
Db 1715 CTGGCACACCATCAACAGCACCAATATCTTCTCTCCCGAGTACGATCGCTACAGCC 1774

QY 192 TTCGCCATGTGAGTTTGTAGTACTAAAGCCGATACCCATGACGAGATTTTGAAGGTTTA 251
Db 1775 TTTCGAATGCTCTCCCTGGGACCAAGCTGACACTCAGATGAATCCTGGAGGCGCTG 1834

QY 252 AACTTTAATTTGACCGAATCCAGAACCCCAATTTACGAGGGTTTTCAGAGTTGTTG 311
Db 1835 AATTTCAACCTCACGAGATTTCCGAGGCTCAGATCCATGAAGCTTTCCAGGAACCTCTC 1894

QY 312 AGAATTTGAATCAACCTGATTTCTCAATTTGCAATTAATCTACTGTGTAACGGTTTATTG 371
Db 1895 CGTACCTCAACAGCAGACAGCGCTCAGCTGACCCAGCAATGGCTGTCTCCTC 1954

QY 372 TCTGAAGTTTAAATTTGGTTGACAAATTCCTAGAAGACGTCGAAGAACTATATCAVAGT 431
Db 1955 AGCGAGGCGCTGAAGTGTGATGAAGTTTGTGGAGGATGTTAAAGATTTGTACCACTCA 2014

QY 432 GAGGCTTTTACCGTTTAAATTTGGTGTACTGAGGAGCTTAAAGCAATTAATGATAT 491
Db 2015 GAAGCTTCACTGTCACTTCGGGACACCGAAGGCGCAAGAAAGATCAACGATAC 2074

QY 492 GTTGAGAAAGCCACCCAGGGTAAGATCGTTGACCTAGTTAAAGAAATAGATCGTGATACC 551
Db 2075 GTGGAGAAGGTTACTCAAGGGAATTTGTGATTTGTCAGAGCTTGACAGAGACACA 2134

QY 552 GTCCTCGCACATGTTAATTTTTCAGGGTAAAGTGGGAAACGCTCTTCGAGGTT 611
Db 2135 GTTTTGTCTGGTGAATTTACATCTCTTTAAAGGCAAAATGGGAGAGACCCCTTTGAAGTC 2194

QY 612 AAAGATCTGAAGAGGAAGATTTTCATGTTGATCAAGTTACTACTGTCAAGATTCCCAATG 671
Db 2195 AAGGACCCGAGGAGAGGACTTCCAGTGACCGAGGTGACCCCGTGAAGGTGCCCTATG 2254

QY 672 ATGAAAGACTGGGTATGTTCAATATTCACATTTGCAAAATTAAGTTCTTGGGTCTTA 731
Db 2255 ATGAAGCCTTTAGGCATGTTTAACATCCAGCACTGTAAGAAGCTGTCCAGCTGGGCTG 2314

QY 732 TTAATGAAGTATTAGGTAAAGCTACTGCTAATTTTTTTTTTACCAGAGGATTAAGCTT 791
Db 2315 CTGATGAATAATCCCTGGGCAATGCCCACCGCCATCTTCTCTGCTGATGAGGGGAAACTA 2374

QY 792 CAACATTTAGAGATGAGTTGACATCATGACATTTACTAATTTTATAGAACGAGGAT 851
Db 2375 CAGACCTGGAATGAATCACTACCCAGATATCATCAACGATTTCTGGAAATGAAGAC 2434

QY 852 CGTGTAGCGCTTCTGCACTCCCAAGTTAAGTATCACCGGTACTTACGACTTAAA 911
Db 2435 AGAAGTCTGCCAGCTTACATTTACCCAACTGTCCTATTACTGGAACCTATGATCTCAAG 2494

QY 912 TCTGTTTAGCGCAGTTAGGTATTAACCAAGTTTTCCTAACGGTGCCTGATGAGTGGT 971
Db 912 TCTGAGGTTTAAATTTGGTTGACAAATTTCCCTAGAGAGCGTCAAGAAACTATATCATAGT 971

Db 2495 AGCGTCTCTGGTCAACTGGGCATCACTAAGGTCTTCAGCAATGGGCTGACCTCTCCGGG 2554

QY 972 GTTACTGAAGAAGCTCCATTAATAATTGAGTAAAGCTGTTTCACAAAGCGGTCTTTAACTATT 1031
Db 2555 GTCACAGAGAGGACCCCTGGAAGCTCTCCAAAGCGGTGTCATGAAGCTGTGCTGACCATC 2614

QY 1032 GATGAAAAGGTTACCGAGGCGCGCGGCTATCTTCTGGAAGCTATTTCCAATGACATTT 1091
Db 2615 GACGAGAAAGGACTGAAGCTGCTGGGCCATGTTTTAGAGGCCATACCCATGCTCTATC 2674

QY 1092 CCACGAGAAATTAATTAATAAACCATTCGTTTTTCTGATGATGAGCAGAACACTAAA 1151
Db 2675 CCCCCGAGGTCAAGTTTCAACAACCCCTTTGCTCTTAAATGATTGAACAAATATCCAAG 2734

QY 1152 AGCCCATTTTATGGTAAAGTTGTCAACCCCAACTCAGAA 1192
Db 2735 TCTCCCTCTTTCATGGGAAAGTGGTGAATCCCAACCCAAA 2775

RESULT 8
US-09-299-141-1
; Sequence 1, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; EARLIER FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1
; LENGTH: 6565
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: PLASMID C-AT
US-09-299-141-1

Query Match 28.1%; Score 429; DB 4; Length 6565;
Best Local Similarity 60.2%; Pred. No. 1.le-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCTCAAGGCGCGCGCTCAAAAAACCGACACAGTATCATCAGCAACCAAGACCAT 71
Db 944 GAGATCCCGAGGAGATGCTGCCAGAGACAGATACATCCACCATATCAGGATCAC 1003

QY 72 CCGACTTTTAAATAAATTAATCTCCAAATTTAGCGGAATTTGCTTTTCTTTGTTATAGACAA 131
Db 1004 CCAACCTTCAACAAGATCAACCCCAACCTGGCTGAGTTGCTGCTTCTATTTGCCACTGCT 1063

QY 132 TTAGCTCATCAAGTAAATTTCTACTAATTTTCTTTAGTCTGCTTTCTATTTGCCACTGCT 191
Db 1064 CTGGCACACCGTCCACAGCAGCAATATCTTCTTCTCCCGAGTGAAGCTGCTACAGCC 1123

QY 192 TTCCGCTATGTTAGTTTGTAGTACTTAAAGCCGATACCCATCAGCAGATTTTGAAGGTTTA 251
Db 1124 TTTGCAATGCTCTCCCTGGGACCAAGGCTGACACTCAGATGAATCTCTGGAGGCGCTG 1183

QY 252 AACTTTAATTTGACCGAATCCAGAAATCCAGAGGTTTTCAGAGGTTTTCAGAGTTGTTG 311
Db 1184 AATTTCAACCTCACGAGATTCGGAGGCTCAGATCATGAAGGCTTCCAGGAACCTCTC 1243

QY 312 AGAATTTTGAATCAACCTGATTTCTCAATTTGCAATTAATCTACTGTTAACTGTTAACTGTT 371
Db 1244 CGTACCTCAACCGACAGCAGACCGGCTCCAGCTCAACCGGCAATGGCTGTTCTCTC 1303

QY 372 TCTGAGGTTTAAATTTGGTTGACAAATTTCCCTAGAGAGCGTCAAGAAACTATATCATAGT 431

Db	1304	AGCGAGGGCCTGAAGCTAGCTAGTGAATGAAGTTTTTGGAGGATGTTAAAAAGTTGTATCACTCA	1363
Qy	432	GAGGCTTTTACCGTTAAATTTTGGTGATCTACGAGGAAGCTAAAAAGCAAAATTAATGATTAT	491
Db	1364	GAAGCCTTCACCTGTCAACTTCGGGACACCGNAGAGGCCAAGAACAACAGATCAACGATTAC	1423
Qy	492	GTTGAAAGGACCCACGAGGTAAAGTACGTTGACCTAGTTAAAGAAATTAGATCGTGATACC	551
Db	1424	GTGAGAGGGTACTCAAGGGAAATTTGGATTTTGGTCAAGGAGCTTGACAGAGACACA	1483
Qy	552	GTCTTCGCACTAGTTAACTATATATTTTTTCAAGGGTAAGTGGGAACGTCCTTTGAGGTT	611
Db	1484	GTTTTTGCTCTGTGAATTACATCTCTTTAAAGCAAAATGGGAGAGACCCCTTTGAAGTC	1543
Qy	612	AAAGATACTGAAGAGGAAGATTTTCATGTTGATCAAGTTACTACTGTCAAAGTTCCAATG	671
Db	1544	AAGGACACCGAAGAGAGACTTCCACGTGGACCAAGTGCACCGGTAAGGTCGCCATTG	1603
Qy	672	ATGAAAGACTGGGTATGTTCAATATCAACATTCGAAAAAATTAAGTTCTTTGGGTCTTA	731
Db	1604	ATGAGCGTTTAGGCATGTTTAAATATCCAGCTCAGACACTGTAGAAGCTGTCCAGCTGGGCTGTG	1663
Qy	732	TTAATGAAAGTATTTAGGTAACGCTACTGCTATTTTTTTTTTACCAGACGAAGSTAAGCTT	791
Db	1664	CTGATGAAATACCTGGGCAATCCACCGCCATCTTCTTCCTGCCTGATAGGGGAAACTA	1723
Qy	792	CAACATTTAGAAATGATGTTGACTCATGACATTAATTAATAATTTTAGAGAACGAGAT	851
Db	1724	CAGCACTGGAAAAATGAATCAACCACGATATCATCAACCAAGTTCTCTGGAAAAATGAAGC	1783
Qy	852	CGTCGTAGCGCTTCTCTGCACCTGCGCAAGTTAAGTATCACCGGTACTTACGACTTAAAA	911
Db	1784	AGAAGGTCGCCAGTTACATTTACCCAACTGTCCATTCTGGAACTATGATCTGAAG	1843
Qy	912	TCGTGTTTTAGGCCAGTTAGGTATTACCAAAAGTTTTTTCTAACGGTGCAGATTTGAGTGGT	971
Db	1844	AGCGTCTGGTCAACTGGGCATCACTAAGTCTTTCACCAATGGGCTGACCTCTCCGG	1903
Qy	972	GTTACTGAAGAAGCTCCATTAATAATTGATTAAGCTGTTTACAAGCGGCTTAACTATT	1031
Db	1904	GTCAAGAGAGGACGCCCTGAAGCTCTCAAGGCGGTGCATAAAGGCTGTCTGCTGACCATC	1963
Qy	1032	GATGAAAGGTTACGAGGCCCGCGGCTATGTTCTCTGGAGCTATTCCAATGAGATT	1091
Db	1964	GAGGAAAGGGGACTGAAGCTCTGGGCGCATGTTTTTAGAGGCCATCCCATGCTCTATC	2023
Qy	1092	CCACCAGAAGTTAAATTTAATAAACCATTCGTTTTTCTGTGATCGAGCAGAACACTAAA	1151
Db	2024	CCCCCGAGGTCNAAGTTCACAAACCCCTTTGCTCTCTTAATGATGTACAAAAATACCAAG	2083
Qy	1152	AGCCCATTTTATGGGTAAAGTTGTCAACCCAACTCAGAA	1192
Db	2084	TCCTCCCTCTTCATGGGAAAGTGTGTAATCCACCCAAAA	2124

RESULT 9

```

US-09-299-141-6
; Sequence 6, Application US/09299141
; Patent No. 6451606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0

```

```

; SEQ ID NO 6
; LENGTH: 6714
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:PLASMID
; OTHER INFORMATION: p43CB-AT
US-09-299-141-6

Query Match      28.1%; Score 429; DB 4; Length 6714;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Caps 0;

```

```

; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0

```


Mon Dec 9 12:50:40 2002

```
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 6924
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: PLASMID
; OTHER INFORMATION: p43rmsENCB-AT
US-09-299-141-10

Query Match      28.1%; Score 429; DB 4; Length 6924;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCCCTCAAGCGCAGCGCTCAAAAACCGCAGCAGTATCATCAGCAGCAAGACCAT 71
Db 2377 GAGGATCCCAGGAGATGCTGCCAGAGACAGATACATCCACCATGATCAGGATCAC 2436
QY 72 CCGACTTTTAAATAAATTAAGTTCCTCAAAATTTAGCGAATTTGCTTTTCTTTGATAGCAA 131
Db 2437 CCAACCTTCAACAAGATACACCCCAACCTGGCTGAGTTCGCTTACGCCCTATACCGCCAG 2496
QY 132 TTAGCTCATCAAGTAATCTTACTAATATTTTATGCTGTTTCTTATGCTGCTGCT 191
Db 2497 CTGGCACACCATGCTCCACAGCACCACATATCTTCTCCCGCAGTGAGCATCGCTACAGCC 2556
QY 192 TTCGCCATGTTAGTTAGTACTTAAGCCGATACCCATGACGAGATTTTAGAAGTTTA 251
Db 2557 TTTGCAATGCTCTCCCTGGGACCAAGGCTGACACTCAGATGAATCCCTGGAGGGGCTG 2616
QY 252 RACTTTTAATTTGACGGAATCCAGAGACCCCAATTCACGAGGTTTTCAGAGTCTGTTG 311
Db 2617 AATTTCAACCTCACGAGATTCGAGGCTCAGATCATTAGAGCTTCCAGGAACCTCCTC 2676
QY 312 AGAAGCTTTGAATCAACCTGATTTCTCAATGCAATTAAGTCTGCTGTAACGGTTTATTTTG 371
Db 2677 CGTACCCTCAACGAGATTCGAGGCTCAGATCATTAGAGCTTCCAGGAACCTCCTC 2736
QY 372 TCTGAGGTTTAAATTTGGTGACAAATTCCTAGAGAGCTCAAGAACTATATCATAGT 431
Db 2737 AGCGAGGGCTTGAAGCTAGTGAAATTTTGGAGGATGTTAAAGATTTGATCACCATCA 2796
QY 432 GAGGCTTTTACCGTTAAATTTTGGTGATCTAGGAAAGCTTAAAGCAAAATTAATGATTAT 491
Db 2797 GAAGCTTCACTGTCACTTCGGGACACACGAGGCGCAAGAAACAGATCAACGATTAC 2856
QY 492 GTTGAGAAAGGACCCAGGGTAAGATCGTTGACCTAGTTTAAAGATTTAGATCGTGATACC 551
Db 2857 GTGGAGAAAGGTTACTCAAGGGAAATTTGGATTTGGTCAAGGAGCTTGACAGAGACACA 2916
QY 552 GTCTTCGCACTAGTTAACTATATTTTTCAGGGTAAAGTGGGACGCTCTTCGAGGTT 611
Db 2917 GTTTTGTCTGCTGGAATTAATCTTCTTAAAGCAATGGGAGACCCCTTTGAAAGTC 2976
QY 612 AAAGATCTGAAGAGGAAGATTTTCATGTTGATCAAGTTACTGTCCTCAAAAGTTCCAAATG 671
Db 2977 AAGGACACCGGAGGAGAGACTTCCACGCTGGACAGGTTGACCCCGTGAAGGTGCTATG 3036
QY 672 ATGAAAGACTGGGTATGTTCAATATTCACATTCGCAAAATTAAGTTCTTTGGTCTTTA 731
Db 3037 ATGAAAGCTTTTGGGATGTTTAAATCTCAGCACTTAAGAGAGCTGTCAGCTGGGTGCTG 3096
QY 732 TTAATGAAGTATTAGGTAACCTACTGCTATTTTATTTTACCAGACGAAGGTAAGCTT 791
Db 3097 CTGATGAATATCTGGCAATGCCACGCCATCTTCTTCTCCCTGATGATGGGGAACATA 3156
QY 792 CAACATTTTGAAGAATGAGTTGACTCATGACATTAATTAATTTTATAGAAACGAGAT 851
Db 3157 CAGCACCTGGAATAAGTCACTACCCACGATATCATCAGCAAGTTCTCTGGAATAAGAAC 3216
QY 852 CGTCGTAGGCTCTCTGCACTGCCAAGTTAAGTATCATCCGGGTACTTACGACTTAAAA 911
```

```
RESULT 12
US-09-299-141-11
; Sequence 11, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 6924
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: PLASMID
; OTHER INFORMATION: p43rmsENCB-AT
US-09-299-141-11
```

```
Query Match      28.1%; Score 429; DB 4; Length 6924;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCCCTCAAGCGCAGCGCTCAAAAACCGCAGCAGTATCATCAGCAGCAAGACCAT 71
Db 2377 GAGGATCCCAGGAGATGCTGCCAGAGACAGATACATCCACCATGATCAGGATCAC 2436
QY 72 CCGACTTTTAAATAAATTAAGTTCCTCAAAATTTAGCGAATTTGCTTTTCTTTGATAGCAA 131
Db 2437 CCAACCTTCAACAAGATACACCCCAACCTGGCTGAGTTCGCTTACGCCCTATACCGCCAG 2496
QY 132 TTAGCTCATCAAGTAATTTCTACTAATATTTTATGCTCTGTTCTTATTTGCCACTGCT 191
Db 2497 CTGGCACACCATGCTCCACAGCACCACATATCTTCTTCCCGCAGTGAGCATCGCTACAGCC 2556
QY 192 TTCGCCATGTTAGTTAGTACTTAAGCCGATACCCATGACGAGATTTTAGAAGTTTA 251
Db 2557 TTTGCAATGCTCTCCCTGGGACCAAGGCTGACACTCAGATGAATAATCTCTGGAGGGGCTG 2616
QY 252 AACTTTAATTTGACCGGAATTCACGAGGCCCAATTCACGAGGTTTTCAGAGATTTGTTG 311
Db 2617 AATTTCAACCTCGAGGATTCGGGAGGCTCAGATCCATGAGGCTTCCAGGAACCTCTC 2676
```

Qy	312	AGAACTTTGAAATCAACCTGATCTCTCAATTCGAATTAACCTACTGGTAACGGTTATATTTTG	371
Db	2677	CGTACCCCTCAACACAGCAGACAGCAGCTCCAGCTGACACCGCAATGGCCTGTTCCCTC	2736
Qy	372	TCGTGAAGGTTTAAATTTGGTTGCACAAATTCCTAGAAAGACGTCAAGAAACATATATCATAGT	431
Db	2737	AGCGAGGGCTGAAGCTAGTGGATANGTTTTTGGAGGATGTTAAAGTTGTACCACCTCA	2796
Qy	432	GAGGCTTTTACCGTTTAAATTTTGGTGATCTACTGAGGAAGCTAAAAAGCAAAATTAATGATTAT	491
Db	2797	GAAGCCCTTCACTGTCAACTTCGGGACACCGAAGAGGCCAAGAAACAGATCAACGATTAC	2856
Qy	492	GTTGAGAAAGGCACCCAGGTAAGATCGTTGACCTAGTTAAGAAATTAGATCTGTTATACC	551
Db	2857	GTGGAGAGGGTACTCAAGGAAATTTGGGATTTGGTCAAGGAGCTTGACAGAGACACA	2916
Qy	552	GTCTTCGCCACTAGTTAACTATATTTTTTCAAGGTAAGTGGGAACGTCCTTTCAGGTT	611
Db	2917	GTTTTGGCTCTGCTGAATTACATCTCTTTAAAGCAATCGGAGAGACCTTTTGAAGTC	2976
Qy	612	AAAGATCTGAGAGGAAGATTTTCATGTTGATCAAGTTACTCTGCAAGTTTCCAATG	671
Db	2977	AAGGACACCGGAGGAAGGACTTCCACGTGGACCAAGGTGACCACCGTGAAGTGCCTATG	3036
Qy	672	ATCAAAAGACTGGGTATGTTCAATATTCAACAATTCCAAAAAATTTAAGTCTTGGTGCTTA	731
Db	3037	ATGAAGCGTTTAGGCATGTTTAACTATCCAGCACTGTAAGNAGCTGTCCACGCTGGGTGCTG	3096
Qy	732	TTAATGAAGTATTTAGGTAAACGCTACTGCTATTTTTTTTTTACCAGACGAAGGTAAAGCTT	791
Db	3097	CTGATGAATACCTGGGCAATGCCACCGCATCTCTCTCGCTGATGAGGGGAACATA	3156
Qy	792	CAACATTTAGAGAAATGAGTTGACTCATGACATATTACTAAATTTTTTAGAGAACGAGGAT	851
Db	3157	CAGCACCTGGAAAAATGAACTCACCCACGATATCATCATCAAGTTCTCTGAAAAATGAAGAC	3216
Qy	852	CGTCGTAGGCTTCTCTGCACCTGCCAAAGTTAAGTATCACCGGTACTTACGACTTAAAA	911
Db	3217	AGAAGGTCTGCCAGTTTACATTTACCAAACTGTCCATTTCTGGAACCTATGATCTGAAG	3276
Qy	912	TCGTGTTTTAGGCCAGTTAGGTATTACCAAGATTTTTTTCTAACGGTGGCGGATTTGAGTGGT	971
Db	3277	AGCGTCTCGGTCAACTGGGCATCATAGGTCTTTCACCAATGGGCTGACCTCTCCGG	3336
Qy	972	GTTACTGAGAGAGCTCCATTAATAATGAGTAAAGCTGTTCAAGCGGTCTTAACATATT	1031
Db	3337	GTCAAGAGAGGACGACCCCTGAAGCTCTCAAGGCGGTGCATAAAGGCTGTGCTGACCATC	3396
Qy	1032	GATTGAAAAGGTTACCGAGGCCCGCGGCTATGTTCTCTGGAAGCTATTCCAATCAGCATTT	1091
Db	3397	GACGAGAAAGGACTGAGCTGCTGGGCCATGTTTTTTAGAGGCCATACCCATGCTCTATC	3456
Qy	1092	CCACCAGAAGTTAAATTTTAATAAACCATTTCTGTTTCTGATGATCGAGCAGAACCTAAA	1151
Db	3457	CCCCCGAGGTCAAGTTCAACAACCCCTTGTCCTCTTAATGATTGAACAAATACCAAG	3516
Qy	1152	AGCCCATTTGTTATGGGTGAAGTGTGTCAACCCAACTCAGAA	1192
Db	3517	TCCTCCCTCTCTCATGGGAAAGTGGTGAATCCACCCCAAAA	3557

RESULT 13

US-09-299-141-7
: Sequence 7, Application US/09299141
: Patent No. 6461606
: GENERAL INFORMATION:
: APPLICANT: FLOTTE, TERENCE R.
: APPLICANT: SONG, SIHONG
: APPLICANT: BYRNE, BARRY J.
: APPLICANT: MORGAN, MICHAEL
: TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
: FILE REFERENCE: 4300.011800

	: CURRENT APPLICATION NUMBER: US/09/299,141	
	: CURRENT FILING DATE: 1999-04-23	
	: EARLIER APPLICATION NUMBER: 60/083,025	
	: EARLIER FILING DATE: 1998-04-24	
	: NUMBER OF SEQ ID NOS: 13	
	: SOFTWARE: PatentIn Ver. 2.0	
	: SEQ ID NO 7	
	: LENGTH: 6981	
	: TYPE: DNA	
	: ORGANISM: Artificial Sequence	
	: FEATURE:	
	: OTHER INFORMATION: Description of Artificial Sequence: PLASMID C-AT2	
	US-09-299-141-7	
	Query Match 28.1%; Score 429; DB 4; Length 6981;	
	Best Local Similarity 60.2%; Pred. No. 1.1e-101;	
	Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps	
Qy	12 GAAGACCCTCAAGCGACGGCGTCAA AAAAACGACACAGTCATCAGCACCAAGACCAT 711	
Db	165 GAGGATCCCGAGGAGATGTGCCCAAGAAGACAGATACATCCACCATGATCAGGATCAC 224	
Qy	72 CGGACTTTTAATAAAATTACTCCAAAATTAGCCGAATTTGC TTTTCTTGATATAGACA 131	
Db	225 CCRACTTCAACRAGATCACCCCAACCTGGCTGAGTTCGCC TTACGCTATACCCGCCAG 284	
Qy	132 TTAGCTCATCAAAAGTAATTTACTAACAATTTTTTTTAGTCT GTTTCATTTGCCACTGCT 191	
Db	285 CTGGCACACCAAGTCCACAGCACCATAATCTCTCTCCCCAG TGAGCATCGCTACAGCC 344	
Qy	192 TTCGCCATGTTGAGTTTAGGTACTAAGCGGATACCCCATG ACAGAGATTTTGAAGGTTTA 251	
Db	345 TTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTCAGATG AAAATCCTGGAGGCGCTG 404	
Qy	252 AAC TTTAATTTGACCGAAATCC CAGAGGCCAAATTCAGCAG GGTTTTCAAGAGTTGTTG 311	
Db	405 AA TTTCAACCTCACGGAGATTC CGGAGGCTCAGATCCATGA AGGCTTCAGGAACCTCCTC 464	
Qy	312 AGA ACTTTTGAATCAACCTGATTTCTCAATTGCAATTAAC TACTGGTAACGGTTTATTTTGTG 371	
Db	465 CGTACCC TCAACCCAGCAGACGCCAGCTCCAGCTGACCCAG CGCAATGGCCTGTTCCCTC 524	
Qy	372 TCTGAAGGTTTAAATTTGGTTGACAAATTCCTAGAAGCG TCAGAAACTATATCATATG 431	
Db	525 AGC GAGGCGCTGAAGCTAGTGGATTAAGTTTTCGGAGGAT GTTTAAAAAGTTGTACCACTCA 584	
Qy	432 GAGCCTTTTACCGTTAATTTTGGTGATCTAGCGAAGCTA AAAAAGCAANATTAATGATTAT 491	
Db	585 GAAGCCTTCACTGTCAACTTCGGGGACACGGAAGAGGCCA AAGAAACAGATCAACAGTATAC 644	
Qy	492 GTTGAGAAAGGCCACCCAGGTAAGATCGTTTGACTAGTTT AAGAAATTAGATCTGTATACC 551	
Db	645 GTGGAGAAGGGTACTCAAGGGAANAATGTGGATTTGGTCA AGGAGCTTGACAGAGACACA 704	
Qy	552 GTCTTCCACTAGTTAACTATATTTTTTCAAGGGTAAGTG GGAAGCTCCTTTTCGAGGTT 611	
Db	705 GTTTTTC TCTGTTGAATTA CATCTCTCTTTAAAGGCAAT TGGGAGAGACCCCTTTTGAAGTC 764	
Qy	612 AAAGATACTGAAGAGNAGATTTTCATGTTGATCAAGTTAC TACTACTGTCAAAAGTTTCCAATG 671	
Db	765 AAGGACACCCGAGGAAGGAGACTTTCACGTGGACAGGTG ACCACCGTGAAGGTGCCTATG 824	
Qy	672 ATGAAAAGACTGGGTATGTTCAATATTCACATTTGCAAT TGA AAAAATAAGTTCTTGGGTCCTTA 731	
Db	825 ATGAAGCGTTTAGGCATGTTTAATATCCAGCACTGTAGA AGCTGTCCAGCTGGGTGCTG 884	
Qy	732 TTAATGAAGTATTTAGGTAAACGCTACTGTCTATTTTTT TTTTACCAGACGAAGGTAAGCTT 791	
Db	885 CTGATGAATACCTGGGCAATGCCACCGCAATCTTCTCTC TGCCTGATGAGGGGAACCTA 944	
Qy	792 CAACATTTAGAAATGAGTTGACTCATGACATTAATTAAT TTTTAGAGAACGAGGAT 851	
Db	945 CAGCACCTGGAATAATGA CTCACCCACGATATCATCACCA AGTTCTCTGGAAAATGAAGAC 100	

QY 852 CGTGTAGCGTCTCTGCGACCTGCCAAAGTTAAGTATCACCGTACTTACGACTTAAAA 911
Db 1005 AGAAGGTCTGCCACCTTACATTTACCCAAACTGTCCTACTGGAACCTATGATCTGAAG 1064
QY 912 TCTGTTTAGCCAGTTAGTATTAACAAAGTTTCTTAACGGTGCCGATTTGAGTGGT 971
Db 1065 AGCGTCTGGTCACTAGGCGCATCACTAAGGCTCTTACGCAATGGGCTGACCTCTCCGGG 1124
QY 972 GTTACTGAGAGCTCCATTAATAATTGAGTAAGAGCTCTTACAAAGCGCTCTTAACCTATT 1031
Db 1125 GTCACAGAGGAGGACCCCTGGAAGCTCTTCAAGCGCGTGCATAGGCTGTCGTGACCATC 1184
QY 1032 GATGAAAGGTTACGAGCGCGCGCGCTATGTTCTTGGAGCAATTTCAATGAGCAATT 1091
Db 1185 GACGAGAAAGGACTGAGCTGCTGGGCGCATGTTTGTAGAGGCCATACCCATGCTCTATC 1244
QY 1092 CCACAGAGTTAAATTAATAAACCAATTCGTTTCTGATGATCGAGCAGACACTAAA 1151
Db 1245 CCCCCGAGGTCAGTTCAACAAACCCCTTGTCTTCTTAATGATTTGAACAAATACCAAG 1304
QY 1152 AGCCCATTTTATGGTAAAGTTGTCAACCCCAACTCAGAA 1192
Db 1305 TCTCCCTCTTCAATGGGAAAGTGGTGAATCCCAACCCAAA 1345

RESULT 14
US-09-299-141-3
; Sequence 3, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.01800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 7054
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: PLASMID dE-AT
US-09-299-141-3

Query Match 28.1%; Score 429; DB 4; Length 7054;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;
QY 12 GAAGACCTCAAGCGCGCGCTCAAAAACCGACCACTATCATCAGGACCAAGACAT 71
Db 1433 GAGGATCCCGAGGAGATGCTGCCAGAGACAGATACATCCCACTGATCAGGATCAC 1492
QY 72 CCGACTTTTAATAATTACTCCAAATTTAGCCGAATTTGCTTTCTTCTGTATAGACAA 131
Db 1493 CCAACCTTCAACAAGATCACCCCAACCTGGTGGTTCAGGCTATACCGCCAG 1552
QY 132 TTAGCTCATCAAGTAATTTCTACTAACATTTTCTTACTGCTCTTCTTATTTGCCACTGCT 191
Db 1553 CTGGACACCACTTCAACAGACCACTATCTCTCTCCCACTGAGCATGCTACAGCC 1612
QY 192 TTCGCCATGTTGAGTTTAGTACTAAAGCCGATACCCATGACGAGATTTTGAAGGTTTA 251
Db 1613 TTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTCAGATGAATCTCTGGAGGGCTG 1672
QY 252 ACTTTAATTTGACCGGAATCCCAAGCCCAATTCAGAGGGTTTTCAGAGATTGTTG 311

Db 1673 AATTTCAACCTCACGGAGATTCCGGAGGCTCAGATCCATGAGGCTTCCAGGAACCTCTC 1732
QY 312 AGAAGCTTTGAATCAACCTGATTTCTCAATTTGCAATTAATCTACTGTTGTAACGGTTTATTTTG 371
Db 1733 CGTACCTTCAACCCAGCAGACAGCCAGCTCCAGCTGAGCAGCGCAATGGCTGTCTCCTC 1792
QY 372 TCTGTAAGTTTAAATTTGGTTGACAAATTTCTTAGAAGACGTCACAAAGACTATATCATAGT 431
Db 1793 AGCGAGGGCTTGAAGCTAGTGATTAAGTTTGGAGGATGTTTAAAGAGTTGTACCACTCA 1852
QY 432 GAGGCTTTTACCGTTAAATTTGGTGATCTAGTGAAGCTTAAAGCAAAATTAATGATTAT 491
Db 1853 GAAGCTTTCACCTGTCACCTTCGGGACACCGAGAGGCCAAGAAACAGATCAACGATTAC 1912
QY 492 GTTGAAAGGACCCAGGCTAAGATCGTTGACCTAGTTTAAAGAAATTTAGTCTGTAAC 551
Db 1913 GTGGAGAGGGTACTCAAGGAAATTTGTGGATTTGGTCAAGGAGCTTGCACAGACACA 1972
QY 552 GTCTTCGCACTAGTTAACTATATTTTTTCAAGGGTGAAGTGGGAAACGCTCTTTCAGGTT 611
Db 1973 GTTTTGTCTCTGGTGAATTTACATCTCTTTTAAAGCAATTTGGAGAGACCTTTTGAAGTC 2032
QY 612 AAAGATCTGAAGAGGAGATTTTTCATGTTGATCAAGTTTACTGTCTCAAAAGTTTCAATG 671
Db 2033 AAGGACACCGAGGAGGAGCTTCCACGTGACACAGGTGACCAAGCTGGAAGTGGCTATG 2092
QY 672 ATGAAAAGACTGGGTATGTTCAATTTCAACATTTGCAAAAATTAAGTCTTTGGGCTCTTA 731
Db 2093 ATGAAGCGTTTAGGCATGTTTAACTTCCAGCTGTAAGAAGCTGTCCAGCTGGGTGCTG 2152
QY 732 TTAATGAAGTATTAGTAACTACTGCTATTTTTTTTACACAGCAAGGTAAGCTT 791
Db 2153 CTGATGAATATCTGGGCAATGCCACCGCATCTTCTTCTGCTGATGAGGGAACTA 2212
QY 792 CAACATTTAGAGAAATGAGTGTGATCATGATTAATTTTACTTAAATTTTATAGAACGAGGAT 851
Db 2213 CAGCACCTGGAATGAATCACTCCACAGCATATCATCACCAGTTCTCTGGAAATGAAGAC 2272
QY 852 CGTGTAGCGCTCTCTGCACTGCGCAAGTTAAGTATCACCGTACTTACGACTTAAAA 911
Db 2273 AGAAGGTCTGCCAGCTTACATTTACCCAACTGTCCATTTACTGGAACTTATGATCTGAAG 2332
QY 912 TCTGTTTTAGCGCAGTTAGTATTACCAAGTTTTTTTCTAAGCGTGCCGATTTGAGTGGT 971
Db 2333 AGCGTCTGGTCACTGGGCATCATAGGCTTTCAGCAATGGGCTGACCTCTCCGGG 2392
QY 972 GTTACTGAAGAAGCTCCATTAATAATTGAGTAAGCTGTTCACAAAGCCGCTTACTATT 1031
Db 2393 GTCACAGAGGAGGACCCCTGAAAGCTCTCCAGGCGCTGCATAAGGCTGTGCTGACCATC 2452
QY 1032 GATGAAAAGGTACCGAGCGCGCGGCTATGTTCTCTGMAAGCTATTTCCAATGAGCAT 1091
Db 2453 GACGAGAAAGGGAGTGAAGCTGTGGGGCATGTTTTAGAGCCCATACCCATGCTATC 2512
QY 1092 CCACGAGAGTTAAATTTAATAAACCAATTTCTGTTTCTGATGATCGAGCAGACACTAAA 1151
Db 2513 CCCCCGAGTCAAGTTCAACAACCCCTTGTCTTCTTAATGATTGAACAAATATACCAAG 2572
QY 1152 AGCCCATTTTATGGTGAAGTTGTCAACCCCAACTCAGAA 1192
Db 2573 TCTCCCTCTTCTATGGGAAAGTGGTGAATCCCAACCCAAA 2613

RESULT 15
US-09-299-141-2
; Sequence 2, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY

FILE REFERENCE: 4300.011800
CURRENT APPLICATION NUMBER: US/09/299,141
CURRENT FILING DATE: 1999-04-23
EARLIER APPLICATION NUMBER: 60/083,025
EARLIER FILING DATE: 1998-04-24
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENGTH: 7405
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: PLASMID E-AT
US-09-299-141-2

Query Match 28.1%; Score 429; DB 4; Length 7405;

Best Local Similarity 60.2%; Pred. No. 1.1e-101;

Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY	12	GAAGACCCCTCAAGGCGACGCGCTCAAAAACCGGACACGATCATCACGACCAAGACCAT	71
DB	1784	GAGGATCCCGGAGGATGCTGCCAGAGACAGATACATCCACCATGATCAGGATCAC	1843
QY	72	CCGACTTTTAAATAAATTAATCTCAAAATTTAGCGGAATTTGCTTTTCTTTGTATAGACAA	131
DB	1844	CCAACTTTCNACAAGATCAACCCCAACCTGGCTGAGTTCGCCCTTCAGCCTATACGCCAG	1903
QY	132	TTAGCTCATCAAGTAATTTCTACTAATATTTTTTTTAGTCTCTTTCTATTGCCACTGCT	191
DB	1904	CTGGCACACGAGTCAACAGCACCAATATCTTCTCTCCCGAGTGAGCTGCTACAGCC	1963
QY	192	TTCCGCATGTTGAGTTTAGGTACTAAGCGGATACCCATACCGATTTTAAAGGTTTA	251
DB	1964	TTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTCACGATGAAATCTGGAGGGCTG	2023
QY	252	AACCTTTAATTTGACCGAAATCCAGAGGCCAAATTCAGAGGTTTTCAGAGGTTGTTG	311
DB	2024	AATTTCAACCTCACGAGATTCGGGAGGCTCAGATCCATGAGGCTTCAGGAATCCTC	2083
QY	312	AGAACTTTGAATCAACCTGATTTCTCAATTTGCAATTAAGTACTGGTAACGGTTTATTTTG	371
DB	2084	CGTACCTCAACCCAGCAGACAGCCAGCTCCAGCTCACCCAGGCAATGGCTGTTCTCTC	2143
QY	372	TCTGAAGGTTTAAATTTGTTGACAAATTCCTAGAGAGCTCAAGAAATATATCATAGT	431
DB	2144	ACGAGGGGCTGAAGTAGTGGATAAGTTTGGAGGATGTTTAAAGTGTACCACTCA	2203
QY	432	GAGGCTTTTACCCTTAATTTGGTGATCTAGGAGAGCTAAAAAGCAAAATTAATGATAT	491
DB	2204	GAGGCTTCACTGTCACTTCGGGACACCGAGAGGCCAAGAAACAGATCAACGATAC	2263
QY	492	GTTGAGAAAGGCCACCGAGGTAGATCGTTGACCTAGTTTAAAGAAATAGATCGTGATACC	551
DB	2264	GTGGAGAAGGTTACTCAAGGAAATTTGGATTTGGTCAAGGAGCTTCACAGAGACACA	2323
QY	552	GTCTTCGCACTAGTTAATATTTTTTTTCAAGGTTAAGTGGGAGGCTTTCGAGGTT	611
DB	2324	GTTTTGCTGTGTAATTACATCTTCTTTTAAAGGCAATGGGAGAGACCCCTTTGAAGTC	2383
QY	612	AAAGATCTAGAGAGGAAGATTTTCAATGTTGATCAAGTTACTGTCAAGTTCCTCAATG	671
DB	2384	AAGGACACCGAGGAAGAGGACTTCCACGTGGACAGGTGACCCCGTGAAGGTGCTATG	2443
QY	672	ATGAAAGACTGGGTATGTTCAATATTTCAACATTTCAAAAAATTAAGTTCTTTGGGTCTTA	731
DB	2444	ATCAAGCGTTTAGGCATGTTTAACTCCAGCACTGTGAAGGCTGTCCAGCTGGGTGCTG	2503
QY	732	TTAATGAAGTATTAGTAACTGCTATTTTTTTTTTACCAGCAAGGTAAGCTT	791
DB	2504	CTGATGAATACCTGGGCAATGCCCGCCATCTTCTCTCTGCTGATGAGGGGAACTA	2563
QY	792	CAACATTTAGAGAAATGAGTTGACTCATGACATTTACTATAATTTTACAGAACGAGGAT	851

DB	2564	CAGCACCTGGAAATGAACTCACCCACGATATCATCACCAAGTTCTTGGAAATGAAGAC	2623
QY	852	CGTGTAGCGTTCTCTGCACCTGCGCAAAAGTTAAGTATFACCGGTACTTAGGACTTAAAA	911
DB	2624	AGAAGGTCTGCCAGCTTACATTTACCCAAACTGTCCATTACTGGAACTATGATCTGAAG	2683
QY	912	TCTGTTTTAGGCCAGTTAGGTATTACCAAAAGTTTTTTCTAACGCTGCCGATTTTCAGTGGT	971
DB	2684	AGCGTCTGGGTCAACTGGGCATCACTAAGTCTTTCAGCAATGGGCTGACCTCTCCGGG	2743
QY	972	GTTACTGAAGAAGCTCCATTAAAAATTTAGTAAAGCTGTTCACAAAGCGCTTTAACTATT	1031
DB	2744	GTCACAGAGGAGGACCCCTGAAGCTCTCCAAGGCCGTGCATAGGCTGTGCTGCCCATC	2803
QY	1032	GATGAAAAAGGTACGAGGCCGCGGCGCTATGTTCCTGGAAAGCTATTTCGAATGAGCAT	1091
DB	2804	GACGAGAAAGGACTGAAAGCTGCTGGGCCATGTTTTTAGAGGCCATACCCATGCTATC	2863
QY	1092	CCACCAGAAGTTAAATTTAAATAAACCATTCGTTTTTCTGTGATGATCGAGCAGACACTAAA	1151
DB	2864	CCCCCGAGGTCAAGTTTCAACAAACCCCTTCTCTTCTTAATGATGAAACAAATACCAAG	2923
QY	1152	AGCCCATTTTATGGGTAAGGTTGTCAACCCCAACTCAGAA	1192
DB	2924	TCTCCCTCTTCATGGGAAAGTGGTGAATCCACCCCAAAA	2964

Search completed: December 6, 2002, 23:35:50

Job time : 88 secs

